



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/513,914 | 02/25/2000 | Ramanamurthy Dantu | 067191.0111 | 7470 |

7590 03/16/2004
Baker Botts, L. L. P.
2001 Ross Avenue
Dallas, TX 75201-2980

EXAMINER

FERRIS, DERRICK W

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2663

DATE MAILED: 03/16/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/513,914

Applicant(s)

DANTU ET AL.

Examiner

Derrick W. Ferris

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-5, 7, 8, 10-19, 21, 22, 24-31, 33-39, 41-46, 48-50, 52-60, 62-67, 69-72 and 76 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 25 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-5,7,8,10-19,21,22,24-31,33-39,41-46,48-50,52-60,62-67,69-72 and 76.

DETAILED ACTION***Response to Amendment***

1. **Claims 1-5, 7-8, 10-19, 21, 22, 24-31, 33-39, 41-46, 48-50, 52-60, 62-67, 69-72, and 76** as amended are still in consideration for this application. Applicant has amended claims 1, 21, 22, 24-27, 31, 39, 44, 50, 52, 53, 60, 64 and 76. Applicant has canceled claims 20, 23, 32, 40, 51, 61, 68, and 77.

2. Examiner does **not withdraw** the obviousness rejection to *Mikkonen*; *Mikkonen* in view of *Ahmed* and *Hamdi*; *Mikkonen* in view of *Ahmed*; *Mikkonen* in view of *Ahmed* and *Hamdi* and in further view of *Schoen*; and *Mikkonen* in view of *Ahmed* and *Hamdi* and in further view of *Perkins* for Office action filed 02/12/04. In response to applicant's arguments filed 02/12/04, at issue is performing a soft handoff using label switched path (LSP). Examiner thanks applicant for amending the claims, however, the examiner was looking for more specific details with respect to how a soft handoff is performed using MPLS in label switched path (LSP) (i.e., examiner was looking for limitations not previously recited in the claims). A soft handoff using a label switched path (LSP) is well known in the art as taught by the cited prior art using a reasonable but broad interpretation of LSP as a tunnel. In particular, see Ahmed at column 20, lines 2-15 and column 20, lines 19-21 (i.e., a virtual path acts as a tunnel as taught by the references in combination). In addressing applicant's comments, *Mikkonen* is silent or deficient to how handoffs are performed, e.g., see column 5, lines 45-67. In particular, *Mikkonen* only discloses that moving one connection from one control station to another control station is possible (i.e., a handoff is possible). With respect to connections, examiner would like to further point out that an IPTAG is used where an IPTAG could be an MPLS label, see e.g., figure 6.

Art Unit: 2663

Thus *Mikkonen* teaches that handoffs are possible and that the connections for a handoff use MPLS labels. At issue with respect to **claim 1**, is how a virtual path is established for a soft handover. In particular, that a virtual path is operable to configure a wireless path in the wireline network to a second wireless router for soft handoff processing for the call, wherein the virtual path is a label switched path (LSP). Not recited in **claim 1** is specifically MPLS. *Mikkonen* is silent or deficient to how a virtual path is established (only that one is possible by “moving” connections). *Ahmed* further clarifies how one skilled in the art would establish such a connection. Applicant is silent in addressing the rejection in combination. However, the examiner has cleaned up the rejection based on applicant’s remarks with respect to motivation. As to **claim 31**, at issue is the location of the two routers with respect to the mobile network. Missing from the claims is that one of the routers is a wireless router (e.g., one broad but reasonable interpretation could be a base station attached to a base station controller which is further attached to a wireline network where two routers in the wireline network have one or more LSP between them). Examiner assumes types of connections are maintained on an add-needed basis such that one connection is for wireless traffic and one connection is for wireline traffic. As to **claim 39**, see figure 6 of *Mikkonen*. Applicant argues but does not claim performing a soft handoff and does not further recite where an LSP is created (i.e., that a router is a wireless router). As to **claim 44**, *Mikkonen* discloses using MPLS as a connection where connections are performed using handoffs. Missing from the recited claim language is that one of the routers with the LSP is a wireless router. With respect to the rejection, *Mikkonen* is silent to specifically performing a soft handoff. *Ahmed* cures the above-cited deficiency using similar logic for claim 1 for a soft handoff. As to **claim 50**, see figure 6 of *Mikkonen*. Applicant argues

Art Unit: 2663

but does not claim performing a soft handoff. As to **claims 60, 64 and 76**, see similar reasoning above for claim 1 where the issue is MPLS with respect to a LSP.

Examiner would like to further clarify the comment made in Office Action filed 01/30/04 under line 2. *Ahmed* (which was not addressed by applicant) teaches performing a soft handoff with an anchor base station using tunneling. The examiner equates tunneling as a label switched path using a reasonable but broad interpretation. In particular, *Ahmed* teaches using a unique address for tunneling, see e.g., column 5, lines 23-45. Examiner uses a reasonable but broad interpretation of label as unique address for a tunnel. Thus *Ahmed* teaches performing a label switched path for data flows for a soft handoff. *Mikkonen* teaches using radio flows and data flows. In particular, *Mikkonen* introduces the concept of a unique address as an IPTAG where an IPTAG is an MPLS label. Thus the references in combination further teach an MPLS label switched path (LSP) where an MPLS label is used in a soft handoff. The examiner feels what may not be taught by the references in combination are how the MPLS labels are established in the mobile network with respect to a soft handoff (other than teaching that they are possible). Applicant's claims only recite that MPLS can be used in general for performing a soft handoff. Thus in closing, first applicant attempts to argue specific limitations not found in the claims. Examiner encourages applicant to amend the independent claims to further clarify that one of the routers is a wireless router, that MPLS label switch paths (LSP) are between two routers for the purpose of performing at least a soft handover for a mobile attached to said wireless routers. Secondly, the examiner is looking for additional limitations to the claims that differentiate how the soft handover is preformed using an MPLS LSP.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 39 and 41** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,587,457 to *Mikkonen*.

As to **claim 39**, see figure 4b with respect to an IP tag and RFID. In particular note an IP flow in reference to figure 6. Not clearly disclosed is routing the packet to a router for call processing. Examiner notes that it would have been obvious to one skilled in the art to route the packet for the purpose of call processing. In particular, one would be motivated to route the packet for call processing for a wireline call such as a call over the Internet. As to an MPLS label see figure 6.

As to **claim 41**, see figure 6.

5. **Claims 1-5, 7, 8, 10-12, 14, 15, 17-19, 21, 22, and 24-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,587,457 to *Mikkonen* in view of U.S. Patent No. 6,256,300 to *Ahmed et al.* ("*Ahmed*") and "Voice Service Internetworking for PSTN and IP Networks" to *Hamdi et al.* ("*Hamdi*") and in further view of "Convergence Between Public Switching and the Internet" to *Schoen et al.* ("*Schoen*").

As to **claim 1**, in extending an access point 4 and a mobile IP router 5 as shown in figure 4a of *Mikkonen*, *Mikkonen* teaches the concept of an IP router as recited in the claims with respect to a first and second interface. One skilled in the art would be

motivated to combine the functionality of two since the mobile IP router 5 acts as an access control point in relation to figure 2 (i.e., they perform as part of the radio access network 2).

Mikkonen may be silent or deficient to performing a soft handoff and in particular, using a virtual path generator operable to configure a wireless virtual path in the wireline network to a second wireless router for soft handoff processing for the call, wherein the virtual path is a label switched path. In particular, *Mikkonen* teaches that handoffs in general are possible using connections (see e.g., column 5, lines 45-67) but is silent or deficient to how such handoffs are setup or established in the system.

Ahmed teaches the above-cited limitation at e.g., column 5, lines 22-45 and columns 19-20.

Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to perform a soft handoff and furthermore use a virtual path generator operable to configure a wireless virtual path in the wireline network to a second wireless router for soft handoff processing for the call, wherein the virtual path is a label switched path. In particular, one skilled in the art would have been motivated to modify the *Mikkonen* reference with the *Ahmed* reference since the *Ahmed* reference teaches how soft handoffs are performed using anchor base stations or routers. In particular, one would be motivated to use a soft handoff to allow a mobile to be in direct communication with multiple nodes simultaneously. One would further be motivated to use an anchor base station since an anchor simplifies handoffs and provides better call continuity. These motivations are further taught by *Ahmed* at column 19, line 65 – column 20, line 8.

In further clarifying the rejection, examiner notes a reasonable but broad interpretation of label switched path as tunnel. In particular, *Ahmed* teaches establishing a tunnel using a unique address (see e.g., column 5, lines 23-50 and column 20, lines 1-21). The unique address comprises the ID of the mobile and a unique IP of the source network node (see e.g., column 4, lines 4-28 of *Ahmed*). *Mikkonen* teaches that an IPTAG is associated with a source address of the source node and the radio flow where the radio flow is identified by the mobile ID (see e.g., column 7, lines 1-20). Thus indirectly taught is using an IPTAG as a unique address where an IPTAG can be an MPLS label as shown in figure 6 of *Mikkonen*. Thus the references in combination also teach performing a soft handover using an MPLS label for a label switched path.

Both *Mikkonen* and *Ahmed* are silent to the further limitation of a PSTN gateway (i.e., where a traffic controller in a router operates with a PSTN gateway through the wireless network). As an example, figure 2 of *Mikkonen* shows communication between two IP networks (i.e., domains) but does not show a PSTN network. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to have a traffic controller in a router be operable to communicate with a PSTN gateway. *Hamdi* teaches using a PSTN gateway to communicate with a PSTN (e.g., see figures 7 and 8 on page 109). One skilled in the art would be motivated to modify the references to include the teachings of *Hamdi* since *Hamdi* teaches internetworking IP (i.e., an in IWF interfaces with IP). In addition, one skilled in the art would be motivated to have a PSTN gateway in order to communicate with users on a PSTN network. Thus *Hamdi* cures the above-cited deficiency. *Schoen* also provides further support by disclosing various forms

for how the PSTN would be connected to the Internet which includes a call agent and a media gateway in general using a similar motivation as mentioned for *Hamdi* (e.g., see figure 12 on page 64).

As to **claim 2**, see figure 4b.

As to **claim 3**, see figure 2 with respect to the mobile IP router and the mobile domain router.

As to **claim 4**, see figure 6 which is technology independent.

As to **claim 5**, as the access point is technology independent examiner notes a first and a second access technology are used [column 5, lines 38-41].

As to **claim 7**, *Mikkonen* in general discloses that handoffs are accomplished using virtual paths or connections as is known in the art [column 5, lines 51-53].

Examiner notes the reference is silent or deficient to how soft handoffs are performed (i.e., other than the connection is moved from control station (i.e., wireless router) to another control station (i.e., wireless router) as is known in the art). Examiner notes that it would have been inherent or obvious to a skilled artisan prior to applicant's invention to perform the soft handoff by using virtual path between the two control nodes (i.e., wireless routers). As support, examiner notes that *Mikkonen* teaches in general using virtual paths between nodes in a system, such as two nodes in a system that are performing a handoff. As further support, *Ahmed* discloses how handoffs are used in a third generation network (such as the one purposed by *Mikkonen*) using the concept of an anchor base station [column 20, lines 2-15] as well as tunnels [column 20, lines 19-21]. Examiner notes that a skilled artisan would recognize that tunnels are implemented using

Art Unit: 2663

MPLS taught by the combined teachings of *Mikkonen* and *Ahmed* (i.e., a virtual path acts as a tunnel as taught in the combined rejection).

As to **claim 8**, *Mikkonen* teaches micro-mobility by having a domain router connect other mobile IP routers in a domain, see figure 2.

As to **claims 10-11**, *Mikkonen* teaches that the core network consists of nodes connected to the Internet [column 6, lines 1-2]. Examiner notes the reference is silent or deficient to a gateway connected to a public switched telephone network (PSTN). Examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention to connect the Internet to the PSTN. One motivation is to route calls over the Internet (or vice versa). As support *Schoen* discloses various forms for how the PSTN would be connected to the Internet which includes a call agent and a media gateway in general (e.g., see figure 12 on page 64).

As to **claims 12**, see column 7, lines 65-67 and column 8, lines 1-4 where the mobile IP router provides policy management and admission control

As to **claim 14**, see the combined rejections for claims 4 and 6.

As to **claim 15**, as the mobile IP router provides QoS examiner notes that the wireless router is further operable to classify packets [column 8, lines 5-29].

As to **claims 17-18**, see the rejection for claims 12-13.

As to **claim 19**, examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention to implement the invention using software as a matter of design choice as is known in the art.

As to **claim 21**, *Ahmed* discloses a selector in selecting an anchor base station for a soft handoff [column 20, lines 2-15].

As to **claim 22**, *Ahmed* discloses a distributor by duplicating packets (i.e., more than one instance) sent to more than one base station during a soft handoff [column 20, lines 2-15].

As to **claims 24-25**, see the similar rejection to claim 2.

As to **claim 26-27**, examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention to implement a soft handover as part of hardware and/or software as a manner of design choice. Examiner notes further support provided by *Ahmed* column 6, lines 26-43.

As to **claims 28-29**, examiner notes a synchronization bias for synchronous transmission is taught using the anchor base station as is known in the art [column 20, lines 2-15]. In particular, packets are transmitted in duplicate (i.e., multicast) with synchronization bias as is known in the art for the purpose or motivation of selecting or combining packets as taught by the reference.

As to **claim 30**, in addition to the rejection for claim 20, *Ahmed* teaches a packet-based network which in combination is an IP flow.

6. **Claims 31, 33, 34-38, 42-43, 44-46, 48-49, 50, 52-59, 60, 62-63, 64-67, 69-72, and 76** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,587,457 to *Mikkonen* in view of U.S. Patent No. 6,256,300 to *Ahmed et al.* ("*Ahmed*").

As to **claim 31**, *Mikkonen* reference teaches a first router (e.g., a mobile IP router 5) and a second router (e.g., a MD router 7) as shown in figure 2. *Mikkonen* further

Art Unit: 2663

teaches a first virtual path between the two routers for at least the transport of user data (e.g., application data).

It may be unclear from *Mikkonen* that a second virtual path is taught between a first and second router. Examiner notes that one is implied given the teachings at column 5, lines 45-67 since the radio access network controls handover, however, the reference is further silent on handover may be implemented. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to further include the limitation of a second virtual path configured between the first and second routers for transmission of wireless protocol traffic for at least the motivation of performing a handoff using an anchor base station as taught by *Ahmed*. In particular, *Ahmed* cures the above-cited deficiency by disclosing that a tunnel is used for a handover between routers (e.g., see column 20, lines 15-21). Thus *Ahmed* provides a motivation for a second virtual path. Examiner notes a reasonable but broad interpretation of label switched path as a virtual path (see similar reasoning in the rejection for claim 1).

As to **claim 33**, see figure 4b.

As to **claim 34**, see the same rejection for claim 20 where examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention to use a second virtual path to provide a soft handoff. Examiner notes the motivation is provided by *Ahmed* that discloses connections between the various base stations where one connection is a virtual path as taught in combination with *Mikkonen*.

As to **claims 35-36**, see column 7, lines 65-67 and column 8, lines 1-4 of *Mikkonen* where the mobile IP router provides policy management and admission control

and where QoS is used for allocating bandwidth and reserving resources as is known in the art.

As to **claim 37**, see *Mikkonen* column 8, line 1.

As to **claim 38**, see the combined rejections for claims 35-37.

As to **claim 42**, examiner notes a synchronization bias for synchronous transmission is taught using the anchor base station as is known in the art [column 20, lines 2-15]. In particular, packets are transmitted in duplicate (i.e., multicast) with synchronization bias as is known in the art for the purpose or motivation of selecting or combining packets as taught by the reference.

As to **claim 43**, examiner note that the anchor base station acts as a primary router for the call as is known in the art.

As to **claim 44**, see similar reasoning for rejection of claim 1.

As to **claims 45**, see similar rejection for claim 35.

As to **claims 46**, see similar rejection for claim 36.

As to **claim 48**, see similar rejection for claim 37.

As to **claim 49**, see similar rejection for claim 1.

As to **claim 50**, see similar reasoning for the rejection for claim 1.

As to **claims 52-53**, examiner notes the selection of an anchor base station using a broad but reasonable interpretation of a forwarding table and trigger rule as is known in the art (e.g., see figure 3b block 30 of *Ahmed*).

As to **claims 54-56**, examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention to use certain selection criteria for a handoff which

includes pattern matching, error correction bits, and frame sequence number (FSN) of the signal. As support, *Ahmed* discloses selecting some “quality metric” for each packet received [column 20, lines 9-10] where such a “quality metric” is pattern matching, error correction bits, or frame sequence numbers as is known in the art.

As to **claims 57-58**, *Ahmed* teaches a broad but reasonable interpretation of an active list and a candidate list in the selection of an anchor base station (i.e., each wireless router is equipped with a handoff manager capable of collecting relevant information from neighboring wireless routers) [column 19, lines 21-36].

As to **claim 59**, *Mikkonen* discloses an RF front end as is known in the art.

As to **claim 60**, in addition to the reasoning for claim 50, examiner notes the active set of routers includes an anchor base station (i.e., the primary router) and a set of directed nodes (i.e., secondary wireless routers). *Ahmed* teaches in general that mobiles communicate with the network node also assist in handoff decisions by providing signal strength information from neighboring nodes [column 19, lines 24-26]. Thus a communication is received from a mobile device identifying an active set of routers.

As to **claim 62**, see figure 4 of *Mikkonen*.

As to **claim 63**, both references disclose GSM radio frames.

As to **claim 64**, see similar rejection with respect to claim 60.

As to **claim 65**, see the same reasoning behind the rejection for claim 2.

As to **claims 66-67**, see similar rejection for claim 21.

As to **claims 69-72**, see similar rejection for claims 28-29.

As to **claim 76**, see similar rejection for claim 60.

Art Unit: 2663

7. **Claims 13 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,587,457 to *Mikkonen* in view of U.S. Patent No. 6,256,300 to *Ahmed et al.* ("*Ahmed*") and "Voice Service Internetworking for PSTN and IP Networks" to *Hamdi et al.* ("*Hamdi*") and in further view of "Convergence Between Public Switching and the Internet" to *Schoen et al.* ("*Schoen*") and "Mobile IP and Security Issue: An Overview" to *Perkins*.

As to **claims 13 and 16**, *Mikkonen*, *Ahmed*, *Hamdi*, and *Schoen* are generally silent to mobile security and in particular using an AAA server. Examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention to provide security in a wireless system that includes an AAA server. As support and motivation examiner notes that *Perkins* discloses using an AAA server for mobile IP as is known in the art. One skilled in the art would be motivated to use an AAA server to perform security, where one skilled in the art would be motivated to add security to a network to eliminate intruders on a network.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2663

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663

DWF

DW-


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 3/12/09